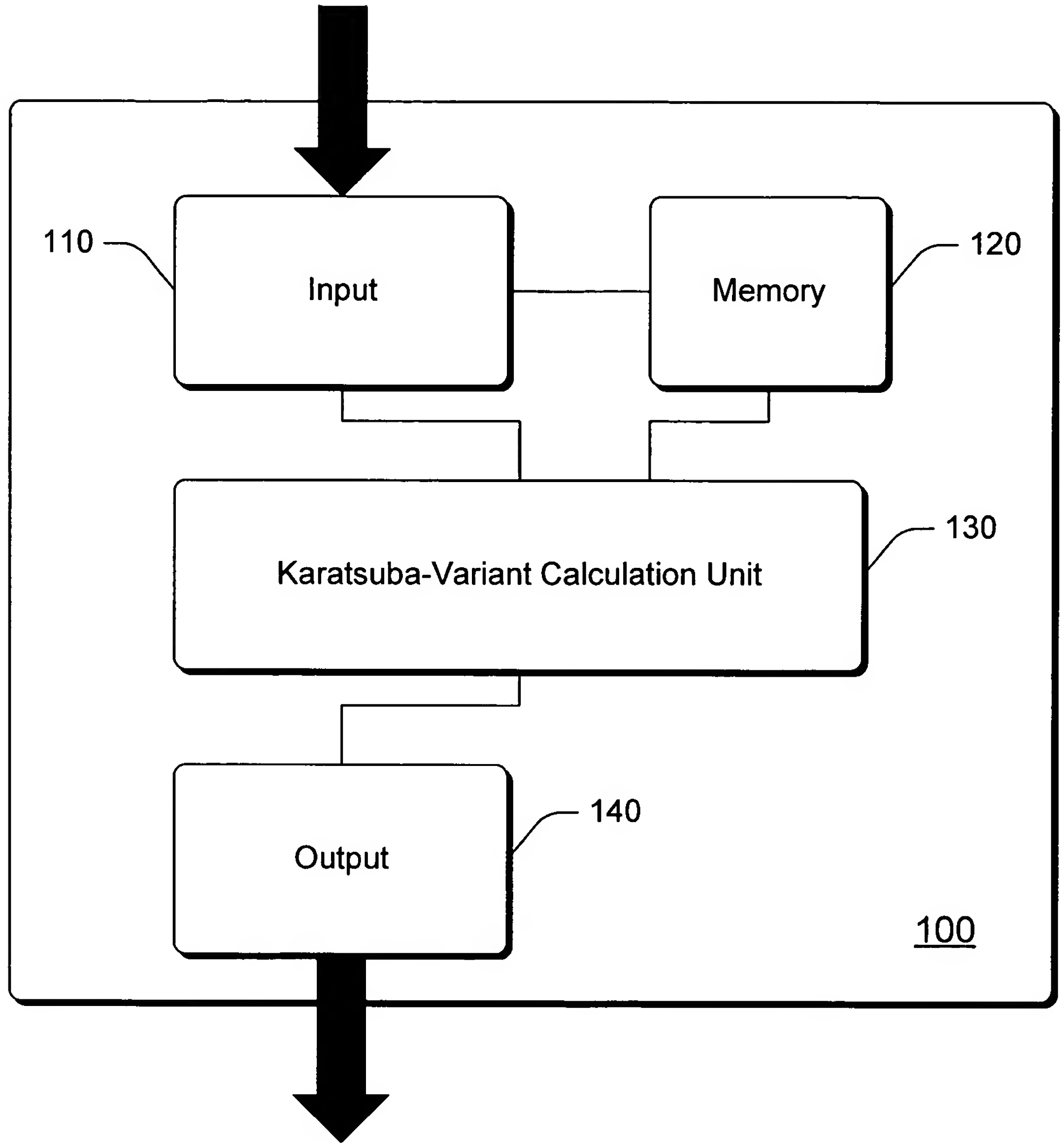
110
Input
Memory
120
Karatsuba-Variant Calculation Unit
130
Output
140
100

Fig. 1

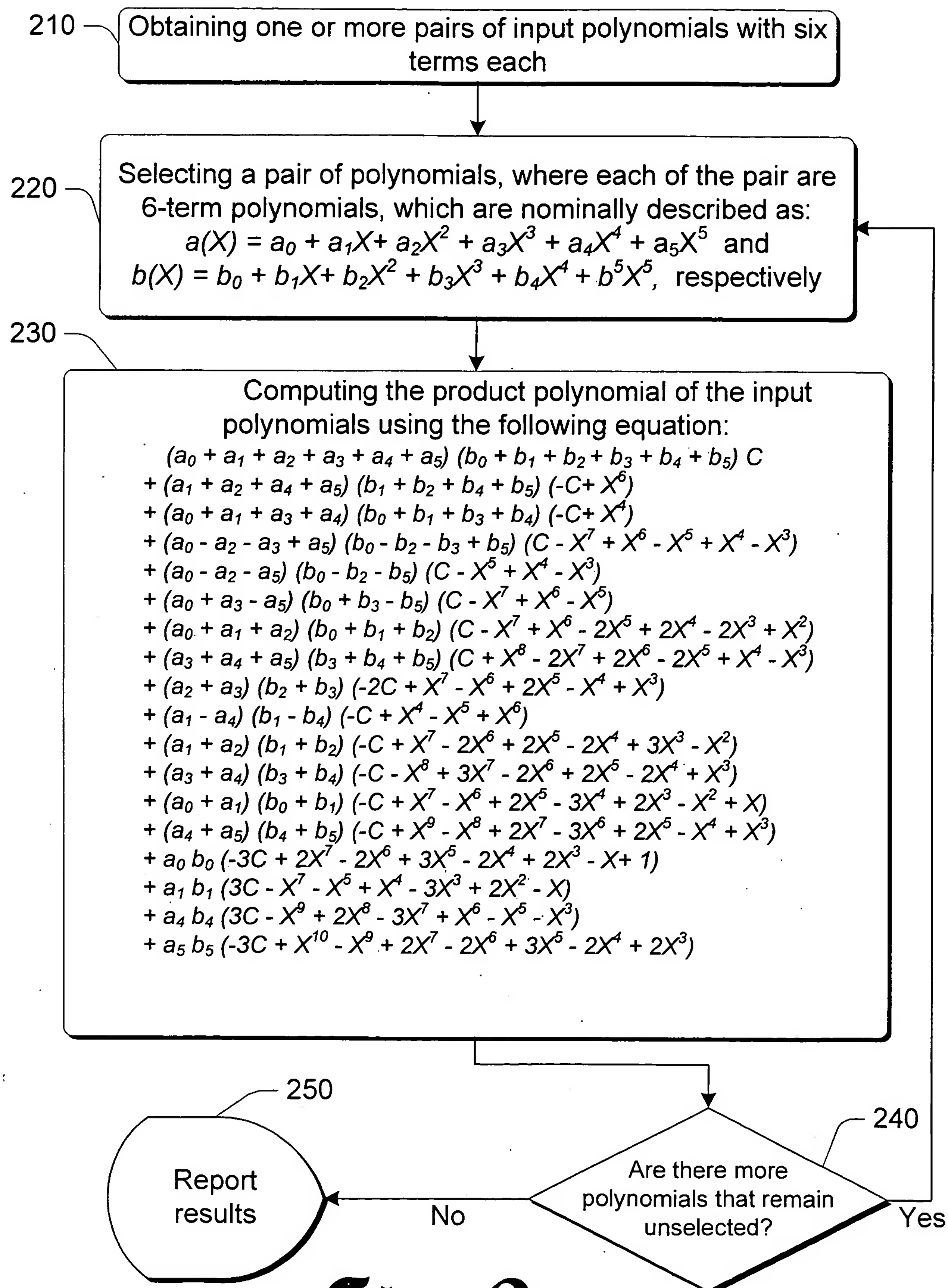
210
Obtaining one or more pairs of input polynomials with six terms each
220
Selecting a pair of polynomials, where each of the pair are 6-term polynomials, which are nominally described as:
$a(X) = a_0 + a_1X + a_2X^2 + a_3X^3 + a_4X^4 + a_5X^5$ and
$b(X) = b_0 + b_1X + b_2X^2 + b_3X^3 + b_4X^4 + b^5X^5$, respectively
230
Computing the product polynomial of the input polynomials using the following equation:
$(a_0 + a_1 + a_2 + a_3 + a_4 + a_5)(b_0 + b_1 + b_2 + b_3 + b_4 + b_5) C$
$+ (a_1 + a_2 + a_4 + a_5)(b_1 + b_2 + b_4 + b_5)(-C + X^6)$
$+ (a_0 + a_1 + a_3 + a_4)(b_0 + b_1 + b_3 + b_4)(-C + X^4)$
$+ (a_0 - a_2 - a_3 + a_5)(b_0 - b_2 - b_3 + b_5)(C - X^7 + X^6 - X^5 + X^4 - X^3)$
$+ (a_0 - a_2 - a_5)(b_0 - b_2 - b_5)(C - X^5 + X^4 - X^3)$
$+ (a_0 + a_3 - a_5)(b_0 + b_3 - b_5)(C - X^7 + X^6 - X^5)$
$+ (a_0 + a_1 + a_2)(b_0 + b_1 + b_2)(C - X^7 + X^6 - 2X^5 + 2X^4 - 2X^3 + X^2)$
$+ (a_3 + a_4 + a_5)(b_3 + b_4 + b_5)(C + X^8 - 2X^7 + 2X^6 - 2X^5 + X^4 - X^3)$
$+ (a_2 + a_3)(b_2 + b_3)(-2C + X^7 - X^6 + 2X^5 - X^4 + X^3)$
$+ (a_1 - a_4)(b_1 - b_4)(-C + X^4 - X^5 + X^6)$
$+ (a_1 + a_2)(b_1 + b_2)(-C + X^7 - 2X^6 + 2X^5 - 2X^4 + 3X^3 - X^2)$
$+ (a_3 + a_4)(b_3 + b_4)(-C - X^8 + 3X^7 - 2X^6 + 2X^5 - 2X^4 + X^3)$
$+ (a_0 + a_1)(b_0 + b_1)(-C + X^7 - X^6 + 2X^5 - 3X^4 + 2X^3 - X^2 + X)$
$+ (a_4 + a_5)(b_4 + b_5)(-C + X^9 - X^8 + 2X^7 - 3X^6 + 2X^5 - X^4 + X^3)$
$+ a_0 b_0 (-3C + 2X^7 - 2X^6 + 3X^5 - 2X^4 + 2X^3 - X + 1)$
$+ a_1 b_1 (3C - X^7 - X^5 + X^4 - 3X^3 + 2X^2 - X)$
$+ a_4 b_4 (3C - X^9 + 2X^8 - 3X^7 + X^6 - X^5 - X^3)$
$+ a_5 b_5 (-3C + X^{10} - X^9 + 2X^7 - 2X^6 + 3X^5 - 2X^4 + 2X^3)$
250
Report results
No
240
Are there more polynomials that remain unselected?
Yes

Fig. 2

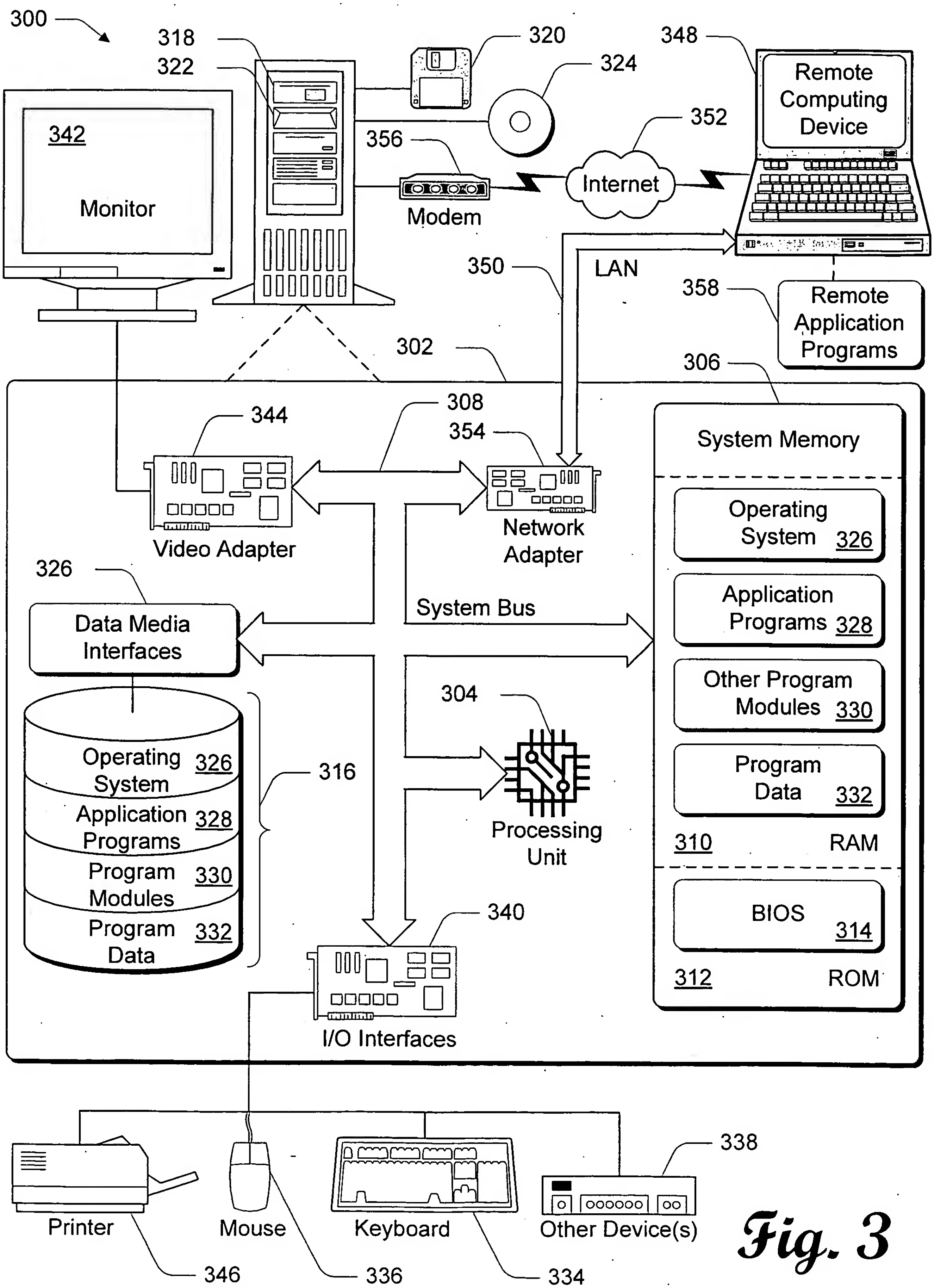
300
318
322
320
324
348
Remote Computing Device
352
342
Monitor
356
Internet
Modem
350
LAN
358
Remote Application Programs
302
306
344
308
354
System Memory
Video Adapter
Network Adapter
Operating System 326
326
Application Programs 328
Data Media Interfaces
System Bus
Other Program Modules 330
304
Operating System 326
316
Program Data 332
Application Programs 328
Processing Unit
310 RAM
Program Modules 330
Program Data 332
340
BIOS 314
312 ROM
I/O Interfaces
338
Printer
Mouse
Keyboard
Other Device(s)
346
336
334

Fig. 3